CLAIMS

1.   A message transformation selection tool for use in a
distributed message processing system, said system
including message transformation means for transforming
an input message in any of a plurality of formats
recognised by one component of said system into an output
message in one of a plurality of different formats
recognised by another component of said system and a
message log for storing representative samples of
messages processed by the respective system components;
said selection tool comprising :

    means for determining the compatibility of each
field of each of said plurality of input message formats
with one or more fields of said plurality of output
message formats;

    means for statistically analysing the values of
message fields in messages stored in said message log;
and

    selection means responsive to said compatibility
determination and said statistical analysis to select the
best fit output message field into which to transform a
given input message field.

2.   A tool as claimed in claim 1 in which said means for
statistical analysis produces the numerical distribution
of values in said message fields, said selection means
selecting the best fit distribution for all said

5   compatible fields.

3.   A tool as claimed in claim 1 in which said selection
means ranks output message fields according to the
results of the statistical analysis.

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4.   A tool as claimed in claim 1 in which said system
further includes a message repository manager for storing
meta-data for said two pluralities of message formats,
said compatibility determining means basing its

15   determination of compatibility on said meta-data.

5.   A tool as claimed in claim 4 in which the values of
said message fields include numerical values and said
means for statistical analysis is arranged to analyse the

20   range of numerical values in the respective fields and to
augment said meta-data with said range of values.

6.   A tool as claimed in claim 4 in which said means for
statistical analysis produces the numerical distribution

25   of values in said message fields, said selection means
selecting the best fit distribution for all said
compatible fields and in which said meta-data for each

field includes said distribution of numerical values for said field.

7.   A method of selecting a message transformation in a distributed message processing system, said system including message transformation means for transforming an input message in any of a plurality of formats recognised by one component of said system into an output message in one of a plurality of different formats recognised by another component of said system and a message log for storing representative samples of messages processed by the respective system components; said selection tool comprising :

    means for determining the compatibility of each field of each of said plurality of input message formats with one or more fields of said plurality of output message formats;

    means for statistically analysing the values of message fields in messages stored in said message log; and

    selection means responsive to said compatibility determination and said statistical analysis to select the best fit output message field into which to transform a given input message field.

8.   A method as claimed in claim 7 in which said
statistical analysis step produces the numerical
distribution of values in said message fields and said
selection step selects the best fit distribution for all
said compatible fields.

9.   A method claimed in claim 7 in which said selection
step includes ranking output message fields according to
the results of the statistical analysis.

10.   A method as claimed in claim 7 in which said system
further includes a message repository manager for storing
meta-data for said two pluralities of message formats,
said compatibility determining step comprising
determining compatibility from said meta-data.

11.   A method as claimed in claim 10 in which the values
of said message fields include numerical values and said
statistical analysis step includes the steps of analysing
the range of numerical values in the respective fields
and augmenting said meta-data with said range of values.

12.   A method as claimed in claim 10 in which said
statistical analysis step produces the numerical
distribution of values in said message fields and said
selection step selects the best fit distribution for all
said compatible fields and in which said meta-data for

each field includes said distribution of numerical values
for said field.

13.   A computer program for selecting a message
transformation in a distributed message processing
system, said system including message transformation
means for transforming an input message in any of a
plurality of formats recognised by one component of said
system into an output message in one of a plurality of
different formats recognised by another component of said
system and a message log for storing representative
samples of messages processed by the respective system
components; said computer program comprising :

        means for determining the compatibility of each
field of each of said plurality of input message formats
with one or more fields of said plurality of output
message formats;

        means for statistically analysing the values of
message fields in messages stored in said message log;
and

        selection means responsive to said compatibility
determination and said statistical analysis to select the
best fit output message field into which to transform a
given input message field.

14. A message broker for use in a distributed message processing system, said broker comprising:

message transformation means for transforming an input message in any of a plurality of formats recognised by one component of said system into an output message in one of a plurality of different formats recognised by another component of said system;

a message log for storing representative samples of messages processed by the respective system components;

means for determining the compatibility of each field of each of said plurality of input message formats with one or more fields of said plurality of output message formats;

means for statistically analysing the values of message fields in messages stored in said message log; and

selection means responsive to said compatibility determination and said statistical analysis to select the best fit output message field into which to transform a given input message field.